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STUDIES IN AMERICAN PLANTS

DOROTHY N. GIBSON

TWO NEW NICARAGUAN JUGLANDACEAE

ANTONIO MOLINA R.

STUDIES IN THE PALM GENUS *SYAGRUS* MART.

S. F. GLASSMAN

TROPICAL AMERICAN PLANTS, IX

LOUIS O. WILLIAMS

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STUDIES IN AMERICAN PLANTS

DOROTHY N. GIBSON

Custodian of the Herbarium

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Studies In American Plants

DOROTHY N. GIBSON

During recent studies of the Hydrophyllaceae and Polemoniaceae for the Floras of Guatemala and Peru, it became clear that several concepts of species within certain highly variable genera of these families were incorrect, due probably to the limited amount of comparative material available to earlier workers. Dr. Standley was becoming aware of this situation as early as 1945 when he occasionally noted in manuscript that certain species "might prove to be only varieties." Since then, additional collections, by providing enough material to show the wide range of variability in these plants, have brought us to the conclusion that some of these minor differences are not constant and therefore do not merit specific rank.

The notes in this paper were made possible by study of collections borrowed from the United States National Herbarium, New York Botanical Garden and Gray Herbarium of Harvard University, as well as those on deposit in the herbarium of the Field Museum, and I wish to express my thanks to the curators of those herbaria.

HYDROPHYLLACEAE

Wigandia urens var. **caracasana** (HBK.) *comb. nov.* *Wigandia caracasana* HBK. Nova Gen. & Sp. 3: 128. 1819. *W. macrophylla* Cham. & Schlecht. Linnaea 6: 382. 1831. *W. scorpioides* Choisy, Ann. Sc. Nat. Sér. 1, 30: 249. 1833. *W. caracasana* var. *macrophylla* (Cham. & Schlecht.) Brand in Engler, Pflanzenr. IV, 251: 136. 1913. *W. caracasana* var. *calycina* Brand, l.c. *W. kunthii* var. *intermedia* Brand, l.c. 137. *W. kunthii* var. *viscosa* (Donn.-Sm.) Brand, l.c. *W. caracasana* var. *viscosa* (Donn.-Sm.) Macbride, Contr. Gray Herb. New Ser. 49: 42. 1917.

Mexico to Costa Rica; Colombia and Venezuela.

Differs from *W. urens* only in its lack of bristles on leaves and stems. The leaves usually appear velvety, without bristles on the midvein. The calyx lobes and capsule, however, may be hispid to bristly-hirsute, as in *W. urens*. Earlier concepts of specific and vari-

etal differences were apparently based on such tenuous characters as vesture (highly variable in the genus) and style length (the styles of both the typical species and the variety elongate markedly after anthesis).

POLEMONIACEAE

Cobaea lutea f. villosa (Standl.) *comb. nov.* *C. villosa* Standl. Contr. U. S. Nat. Herb. 17: 454. 1914.

Differs from *C. lutea* only by villous nodes and by occasional villosity and/or puberulence of petioles.

Known only from El Salvador.

Cobaea lutea f. viorna (Standl.) *comb. nov.* *C. viorna* Standl. Contr. U. S. Nat. Herb. 17: 453. 1914.

Differs from *C. lutea* only in the absence of long cilia on sepals and leaf bases. Standley, in manuscript, placed his *C. viorna* in synonymy with *C. lutea*.

Known only from Guatemala.

Cobaea pachysepala f. tomentulosa (Standl.) *comb. nov.* *C. tomentulosa* Standl. Contr. U. S. Nat. Herb. 17: 457. 1914.

Differs from *C. pachysepala* only in more dense vesture: the stems may be obscurely tomentulose to densely villous, the nodes often densely white-villous, the petiolules short-villous to wooly, the leaflets sparsely pubescent to villous beneath, especially along veins, the sepals usually densely tomentulose outside as well as along inside margins, and the corollas may have more scattered puberulence on the lobes.

Although Standley, in his original descriptions, states that there are eight or nine seeds in each cell of the capsule of *C. pachysepala* and four to six seeds in each cell of his *C. tomentulosa*, I found only six or seven seeds in each locule of both *C. pachysepala* and *C. tomentulosa*. Further, Standley, in manuscript, says of *C. tomentulosa*: "Closely related to *C. pachysepala*, of which it may be only a form or variety."



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